

MEASURING APPARATUS OF FLOW RATE

Publication number: JP60187815 (A)

Publication date: 1985-09-25

Inventor(s): MACHIDA KAORU +

Applicant(s): TOSHIBA KK +

Classification:

- **international:** **G01F1/66; G01F1/66;** (IPC1-7): G01F1/66

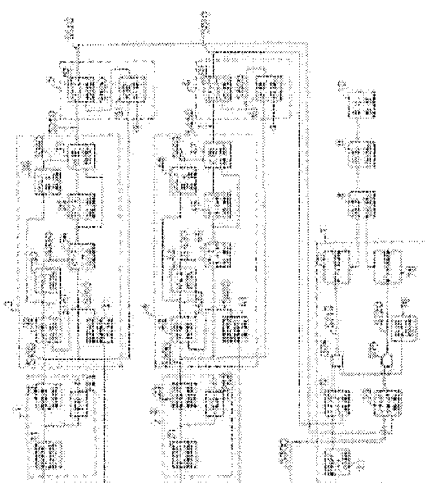
- **European:** G01F1/66F

Application number: JP19840043376 19840307

Priority number(s): JP19840043376 19840307

Abstract of **JP 60187815 (A)**

PURPOSE: To detect a flow rate accurately, by detecting the maximum value of a level of a signal received from an ultrasonic oscillator, and by detecting an initial zero-crossing generated thereafter. **CONSTITUTION:** Ultrasonic wave transmitter-receiver units 1 and 2 transmit ultrasonic waves to a fluid to be measured and receive same therefrom. Maximum value detector units 3 and 4 detect the maximum values of signals from received signal amplifier circuits 12 and 22. Zero point detector circuits 5 and 6 detect zero points beyond sections in which the maximum values are found. A time monitor unit 7 monitors a time from the drive of the ultrasonic waves to the reception thereof. A subtraction circuit 8 calculates an ultrasonic propagation time difference information, and a computing circuit 9 in the following stage computes a flow speed. In this circuit, a flow rate can be measured accurately even under the condition in which drive-damping frequency and a received wave overlap with each other.



Data supplied from the **espacenet** database — Worldwide